Complete Summary

GUIDELINE TITLE

Canadian contraception consensus - update on depot medroxyprogesterone acetate (DMPA).

BIBLIOGRAPHIC SOURCE(S)

Black A, Ad Hoc DMPA Committee of the Society of Obstetricians and Gynaecologists of Canada. Canadian contraception consensus--update on Depot Medroxyprogesterone Acetate (DMPA). J Obstet Gynaecol Can 2006 Apr;28(4):305-8. [31 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Unintended pregnancy

GUIDELINE CATEGORY

Counseling
Evaluation
Risk Assessment

CLINICAL SPECIALTY

Family Practice
Obstetrics and Gynecology

INTENDED USERS

Advanced Practice Nurses
Health Care Providers
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To review the evidence and provide recommendations on the use of depot medroxyprogesterone acetate (DMPA)

TARGET POPULATION

Women of reproductive age

INTERVENTIONS AND PRACTICES CONSIDERED

1. Counseling of patients on potential effects of depot medroxyprogesterone acetate (DMPA) on bone mineral density
2. Counseling of patients on overall risks and benefits of continuing DMPA use, including:
    - Calcium and vitamin D supplementation
    - Smoking cessation
    - Weight-bearing exercise
    - Decreased alcohol and caffeine consumption

MAJOR OUTCOMES CONSIDERED

- Bone mineral density
- Risk of fractures

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly designed randomized controlled trial.

II-1: Evidence obtained from well-designed controlled trials without randomization.

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group.

II-3: Evidence from comparisons between times or places with or without the intervention. Dramatic results from uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Classification of Recommendations*

A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination.
D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination.
E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination.

*Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This update was prepared by the Ad Hoc Depot Medroxyprogesterone Acetate (DMPA) Committee of the Society of Obstetricians and Gynaecologists of Canada. This update was approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The grades of recommendations (A-E) and levels of evidence (I, II-1, II-2, II-3, and III) are defined at the end of the "Major Recommendations" field.

Summary Statements

1. Depot medroxyprogesterone acetate (DMPA) use is associated with a decrease in bone mineral density (BMD). This decrease appears to be most rapid in the first two years of use. The loss of BMD appears to be largely reversible once DMPA is discontinued. **(Level I)**
2. DMPA is associated with a decrease in BMD in adolescents during a critical period of bone accretion. BMD decrease during adolescence may result in ultimately lower peak bone mass. **(Level I)**
3. Available data do not support the routine use of BMD testing in DMPA users. In selected patients with significant risk factors, BMD testing may be appropriate. BMD testing of DMPA users is best done in the context of a clinical study.

4. On the basis of current data, the advantages of using DMPA outweigh the concerns about its use by adolescent or perimenopausal women who have contraindications to, or difficulty using, other contraceptive methods. Research is needed to determine the long-term effects of DMPA use on BMD and future risk of fracture in adolescents and young adults.

Recommendations

1. Health care providers should inform patients of the potential effects of DMPA on BMD and counsel them on "bone health," including calcium and vitamin D supplementation, smoking cessation, weight-bearing exercise, and decreased alcohol and caffeine consumption. **(Grade A)**
2. Society of Obstetricians and Gynaecologists of Canada (SOGC) endorses the World health organization (WHO) recommendation that "there should be no restriction on the use of DMPA, including no restriction on duration of use, among women aged 18 to 45 who are otherwise eligible to use the method." **(Grade A)**
3. The overall risks and benefits of continuing DMPA use should be discussed with DMPA users at intervals throughout the course of treatment. **(Grade A)**
4. SOGC does not recommend routine BMD testing in DMPA users. **(Grade C)**

Definitions:

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly designed randomized controlled trial.

II-1: Evidence obtained from well-designed controlled trials without randomization.

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group.

II-3: Evidence from comparisons between times or places with or without the intervention. Dramatic results from uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Classification of Recommendations**

A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination.
D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination.

E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination.

*The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.

**Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate use of depot medroxyprogesterone acetate (DMPA) for the prevention of pregnancy

POTENTIAL HARMS

- Frequently reported side effects with depot medroxyprogesterone acetate (DMPA) include menstrual cycle disturbances, headache, weight changes, and mood effects. Amenorrhea occurs in 55% to 60% of DMPA users at 12 months.
- DMPA use may result in a decrease in bone mineral density.
- Although this is a reversible method of contraception, return of fertility may be delayed for an average of up to nine months.

QUALIFYING STATEMENTS

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This guideline reflects emerging clinical and scientific advances as of the date issued and are subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Black A, Ad Hoc DMPA Committee of the Society of Obstetricians and Gynaecologists of Canada. Canadian contraception consensus--update on Depot Medroxyprogesterone Acetate (DMPA). J Obstet Gynaecol Can 2006 Apr;28(4):305-8. [31 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Apr

GUIDELINE DEVELOPER(S)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of Obstetricians and Gynaecologists of Canada

GUIDELINE COMMITTEE

Ad Hoc DMPA Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Disclosure statements have been received from all members of the committee.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Society of Obstetricians and Gynaecologists of Canada Web site.

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on April 29, 2009. The information was verified by the guideline developer on May 22, 2009.

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Date Modified: 7/27/2009